IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF KANSAS

SPRINT COMMUNICATIONS COMPANY L.P.,	)	
Plaintiff,	)	
v.	)	Case No. 08-2046-JWL
BIG RIVER TELEPHONE COMPANY, LLC,	)	
Defendant.	)	

MEMORANDUM AND ORDER

Plaintiff Sprint Communications Company L.P. ("Sprint") has brought patent infringement claims against defendant Big River Telephone Company, LLC ("Big River"). The parties have submitted their arguments concerning the construction of various terms found in the relevant patents' claims, made both in written submissions and at the hearing held on May 18, 2009. The Court construes those terms as set forth herein.

I. Background

Sprint, a telecommunications company, holds various patents relating to technology employing packet networks to carry telephone calls that initiate or terminate on the Public Switched Telephone Network (PSTN). Big River, as one part of its telecommunications business, provides Voice over Internet Protocol (VoIP) services to

local cable companies. Sprint alleges that Big River's VoIP technology infringes six of its patents.

The six patents at issue may be divided into two groups. The '605 Family of patents, referred to by Sprint as the Call Control Family, includes United States Patent Nos. 6,452,932 ("the '932 Patent"), 6,463,052 ("the '052 Patent"), and 6,633,561 ("the '561 Patent"), which patents were filed as continuations of United States Patent Application No. 08/238,605. The '301 Family of patents, referred to by Sprint as the Broadband System Family, includes United States Patent Nos. 6,473,429 ("the '429 Patent"), 6,343,084 ("the '084 Patent"), and 6,298,064 ("the '064 Patent"), which patents were filed as continuations of the application for United States Patent No. 5,991,301. The patents within a particular family share identical written descriptions and drawings, although the patents' claims vary.

Many of these same patents were at issue in a previous case brought in this Court by Sprint against Vonage Holdings Corporation and Vonage America, Inc. (collectively "Vonage"). The Court construed various terms from the claims of the patents at issue in that case (hereafter referred to as the *Vonage* case) in two written opinions. *See Sprint Comm. Co. L.P. v. Vonage Holdings Corp.*, 518 F. Supp. 2d 1306 (D. Kan. 2007); *Sprint Comm. Co. L.P. v. Vonage Holdings Corp.*, 500 F. Supp. 2d 1290 (D. Kan. 2007). Those opinions contain additional information concerning the patents and technology at issue and their history. Moreover, in the *Vonage* opinions, the Court construed many patent terms that are also in dispute in the present case.

II. Claim Construction Standards

Claim construction is governed by the methodology set forth by the Federal Circuit Court of Appeals in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). It is a bedrock principle of patent law that the claims of the patent define the patentee's invention. *Id.* at 1312. Thus, claim construction begins with the words of the claim itself. *Id.* The words of a claim should be given their ordinary and customary meaning as understood by a person of ordinary skill in the art in question at the time of the invention. *Id.* at 1312-13. "[T]he claims themselves provide substantial guidance as to the meaning of particular claim terms." *Id.* at 1314. Both "the context in which a term is used in the asserted claim" and the "[o]ther claims of the patent in question" are useful for understanding the ordinary meaning. *Id.*

The claims do not stand alone, but are part of "a fully integrated written instrument." *Id.* at 1315. Therefore, they "must be read in view of the specification, of which they are a part." *Id.* (quotation omitted). In fact, the specification is "the single best guide to the meaning of a disputed term" and is often dispositive. *Id.* The specification may reveal a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess, in which case the inventor's lexicography governs. *Id.* at 1316. In other cases, it may reveal an intentional disclaimer, or disavowal, of claim scope by the inventor; in that case, "the inventor has dictated the correct claim scope, and the inventor's invention, as expressed in the specification, is regarded as dispositive." *Id.* The fact that the specification includes

limited and specific embodiments is insufficient to define a term implicitly, and it is improper to confine the scope of the claims to the embodiments of the specification. *Id.* at 1323. "The construction that stays true to the claim language and most naturally aligns with the patent's description of the invention will be, in the end, the correct construction." *Id.* at 1316 (quotation omitted).

Moreover, the court must be careful not to import limitations from the specification into the claim. *Id.* at 1323. In walking the "fine line" between using the specification to interpret the meaning of a claim and importing limitations from the specification into the claim, the court must "focus . . . on understanding how a person of ordinary skill in the art would understand the claim terms." *Id.* The purposes of the specification are to teach and enable those of skill in the art to make and use the invention and to provide a best mode for doing so. *Id.* Reading the specification in context should reveal whether the patentee is setting out specific examples of the invention to accomplish those goals, or whether the patentee instead intends for the claims and the embodiments in the specification to be strictly coextensive. *Id.* Thus, the court's task is to determine "whether a person of skill in the art would understand the embodiments to define the outer limits of the claim term or merely to be exemplary in nature." *Id.*

The court should also consult the patent's prosecution history, if in evidence. *Id.* at 1317. Like the specification, the prosecution history "provides evidence of how the PTO [Patent and Trademark Office] and the inventor understood the patent." *Id.* "Yet

because the prosecution represents an ongoing negotiation between the PTO and the applicant, rather than the final product of that negotiation, it often lacks the clarity of the specification and thus is less useful for claim construction purposes." *Id.*

Finally, the court may consult extrinsic evidence such as expert and inventor testimony, dictionaries, and learned treatises. *Id.* These have all been recognized as tools that can assist the court in determining the meaning of particular terminology. *Id.* at 1318. Extrinsic evidence may be helpful to the court in understanding the technology or educating itself about the invention. *Id.* In particular, because technical dictionaries collect accepted meanings for terms in various scientific and technical fields, they can be useful in claim construction by providing the court with a better understanding of the underlying technology and the way in which one skilled in the art might use the claim terms. *Id.* at 1318. "However, conclusory, unsupported assertions by experts as to the definition of a claim term are not useful to a court." *Id.* Extrinsic evidence is less reliable than intrinsic evidence in determining the construction of claim terms, and therefore the court should discount any expert evidence that is at odds with the intrinsic evidence. *Id.*

With respect to a number of patent terms at issue here, Big River does not rely on any particular language from the patent claims to support its construction, but instead argues that the relevant specification "repeatedly and consistently" describes (and limits) the claimed invention in a particular way consistent with its urged construction. Big River relies particularly on the Federal Circuit's opinion in *Microsoft Corp. v. Multi-*

Tech Sys., Inc., 357 F.3d 1340 (Fed. Cir. 2004), in which the court relied for its construction on the fact that the specification "repeatedly and consistently" described the overall invention—and not merely a preferred embodiment—in a particular way. *See id.* at 1347-48; *see also Netcraft Corp. v. eBay, Inc.*, 549 F.3d 1394, 1398 (Fed. Cir. 2008) ("repeated" use of the phrase "the present invention" described the invention as a whole; specification "consistently" described the invention in a particular way); *Praxair, Inc. v. ATMI, Inc.*, 543 F.3d 1306, 1324 (Fed. Cir. 2008) (reading claim in light of specification's consistent emphasis on a fundamental feature of the invention); *Honeywell Int'l v. ITT Indus.*, 452 F.3d 1312, 1318 (Fed. Cir. 2006) (description did not refer merely to a preferred embodiment, but shows that the scope of the relevant claim is limited); *C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 864 (Fed. Cir. 2004) ("Statements that describe the invention as a whole, rather than statements that describe only preferred embodiments, are more likely to support a limiting definition of a claim term.").

Sprint argues that a court may not rely on a specification's description to limit the scope of a claim or the meaning of a term unless the specification includes an express disclaimer or disavowal of scope. Sprint cites *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898 (Fed. Cir. 2004), in which the Federal Circuit again rejected the argument that if a patent describes only a single embodiment, the claims must be construed as being limited to that embodiment. *See id.* at 906. The court concluded that its case was governed by the principle that "absent a clear disclaimer of particular subject matter, the

fact that the inventor may have anticipated that the invention would be used in a particular way does not mean that the scope of the invention is limited to that context." *Id.* at 909 (quoting *Northrop Grumman Corp. v. Intel Corp.*, 325 F.3d 1346, 1355 (Fed. Cir. 2003)); *see also Voda v. Cordis Corp.*, 536 F.3d 1311, 1320 (Fed. Cir. 2008) (any intentional disclaimer or disavowal of claim scope in the specification must be clear).

The Court does not agree with Sprint's position that Big River must point to an express disclaimer or disavowal in the specification to rely on the *Microsoft* "repeated and consistent" description standard. In *Liebel-Flarsheim*, the court distinguished other cases, in which courts had adopted narrow constructions of claims language, on the basis that those cases involved specific reasons dictating such a construction, including the fact that the pertinent specification had described the invention as a whole in a particular manner. *See Liebel-Flarsheim*, 358 F.3d at 907-908. Indeed, in *Irdeto Access, Inc. v. Echostar Satellite Corp.*, 383 F.3d 1295 (Fed. Cir. 2004), the court rejected this same argument based on *Liebel-Flarsheim* and similar cases; the court found that such cases were not inconsistent with cases in which the court has redefined a patent term by reference to its consistent use in a specification. *See id.* at 1302-03. Similarly, in *Nystrom v. TREX Co.*, 424 F.3d 1136 (Fed. Cir. 2005), the court construed a term by reference to its "consistent" use in the specification, even though the specification did not contain a clear disavowal of claim scope. *See id.* at 1145; *see also C.R. Bard*, 388 F.3d at 864 (distinguishing *Liebel-Flarsheim* as case in which the specification did not define the term, even implicitly).

It is clear from these cases from the Federal Circuit that the repeated and consistent use of a term in a particular manner in the specification may support a narrow construction of a claim term, even without an express disclaimer of scope by the inventor in the patent. In such an instance, the consistent description of the entire claimed invention discloses the inventor's intent regarding the meaning of the term and the scope of the invention. At the same time, however, the repeated and consistent use of the term must refer to the invention as a whole, and not merely to one or more embodiments of the claimed invention, as claim scope may not be limited merely to conform to the scope of the embodiments. *See, e.g., Seachange Int'l v. C-COR Inc.*, 413 F.3d 1361, 1369-70 (Fed. Cir. 2005) (rejecting argument based on *Microsoft* and similar cases because it was unclear whether the language at issue from the specification was describing one possible embodiment or the invention itself).

III. ’605 Family of Patents

The Court first construes disputed terms from the ’605 Family of patents.[1]

A. “Communication System”

[1]In their joint statement identifying their disputed claim constructions, Big River proposed a particular construction of the term “device”, found in the ’052 Patent, claims 1 and 11. Big River now agrees with Sprint, however, that the term does not require construction. Accordingly, the Court does not construe that term.

The parties dispute the meaning of the term "communication system," which is found in the '932 Patent, claims 1 and 18; the '561 Patent, claims 1 and 24; and the '052 Patent, claim 1. Sprint argues that the term should be construed to mean *a plurality of network elements and connections forming a network to transfer information*. In *Vonage*, the Court gave the term the same construction urged by Sprint here, which Vonage did not dispute. *See* 518 F. Supp. 2d at 1315. Big River seeks to construe the term to mean *a plurality of network elements and connections forming a network to transfer a user communication over a communication path selected during call set-up*. Thus, Big River essentially agrees with Sprint's definition, but seeks to add a limitation. As framed by the parties, the dispute centers on whether this term should be construed to incorporate the concept of a communication path established during set-up, with each packet traveling over the same path or route for the entirety of the call.[2]

Big River does not rely on the language of the claims themselves, as the claims contain no such limitation to the term "communication system". Instead, Big River, relying on *Microsoft*, argues that the '605 Family specification's repeated and consistent description demonstrates that such a path is fundamental to the invention. Big River points to the great number of references in the specification to the fact that communication systems establish paths. For instance, at the outset, the specification

[2]The parties note that this dispute is key to the issue of infringement because Big River's technology does not require that packets use a single route set up at the beginning of a call, but instead allows packets to travel over different routes during the same call.

states that "[t]elecommunications systems establish a communications path between two or more points" and that "[c]ommunication control is the process of setting up a communications path between the points." ('605 Family at 1:29-30, 36-37.) The summary in the specification makes clear that the invention separates communication control processing from the switches that form the connections or path. Big River notes that "signaling" is cited throughout the specification as a common method of communication control. Sprint has agreed that "signaling" is defined as a method to set up or tear down a call. Thus, Big River argues that the communication path must be set up before any data is transmitted during the call. Big River further notes that such connection-based systems are the only systems discussed, and that the specification contains no references to connectionless systems. Finally, Big River argues that in every embodiment described in the specification, the communication control processor (CCP) establishes paths before any packets are sent, even where the CCP shares such communication control with other network elements in the system.

Based on its review of the '605 Family specification, the Court rejects this argument and concludes that the specification does not sufficiently describe the invention with the limitation urged by Big River. Big River has not referred the Court to any particular language in the specification that actually describes the invention, or even an embodiment, as a system that sets up only a single path per call or that sets up the entire communications path before any data is transmitted. Thus, *Microsoft* and other cases in which the specification clearly described the entire invention as limited may be

distinguished, as the specification at issue here contains no such clear description containing the limits argued by Big River. Instead, Big River relies on the specification's use of the singular noun "path"; it is not clear, however, that the patentee was not simply using that form for ease in describing what happens with respect to any particular path, but instead intended to limit the scope of the invention to a single path per telephone call. Similarly, Big River equates "signaling" with call set-up, but there is no clear language requiring an entire path prior to the transmission of any data. The specification does not mention these limits as a part of the invention, and the references to "path" and "signaling" are simply too oblique to effect limits on the claims' broad scope in the manner urged by Big River.[3]

It is clear from a review of the specification, and in particular the summary of the invention, that the patented invention is a method for separating communication control from the actual switches. The overall invention is not described otherwise. Big River essentially relies on references to path creation. Sprint concedes, as it must, that there must be communication paths on which information travels. Big River has not shown, however, that the specification describes an invention that imposes limits regarding the kind of path that is established. To the contrary, language in the specification that contemplates varied kinds of paths and varied ways to select paths (e.g., '605 Family at

[3]In this regard, the references in the specification are nothing like the specific descriptions of the '301 Family invention as an ATM interworking multiplexer, on which the Court relies in limiting the scope of the term "interworking unit". *See infra* Part IV.A; *see also Vonage*, 500 F. Supp. 2d at 1314-16.

5:16-23, 16:60) suggests that the inventor did not intend to limit the scope of the invention based on a particular type of communication path. Accordingly, the Court concludes that the specification does not support the construction urged by Big River.

The Court also rejects Big River's argument based on the doctrine of prosecution history disclaimer. Big River argues that the patent applicant distinguished prior art by describing the invention as one that uses signaling to control path creation. In the cited excerpt, however, the applicant actually distinguished the prior art references on the basis of the present invention's separation of communication control from the path; the applicant did not distinguish those references by stating that the invention requires a single path or that the entire path must be completed before any information is transmitted. Thus, the cited prosecution history is not helpful to the Court's construction.

Nor is the Court persuaded by Big River's citation to extrinsic evidence consisting of testimony in which the inventor noted his ultimate rejection of connectionless systems. The inventor did not testify that the patent was intended not to encompass such systems, and at any rate, Big River has not cited any authority that would allow the testimony of the inventor concerning his invention to overcome the language of the patent claims. *See Howmedica Osteonics Corp. v. Wright Med. Tech., Inc.*, 540 F.3d 1337, 1346-47 (Fed. Cir. 2008) (inventor's understanding of his invention does not equate to an understanding of the patent claims; "inventor testimony as to the inventor's subjective intent is irrelevant to the issue of claim construction"). Nor are Big River's

citations to the '301 Family specification helpful.

In summary, Big River has not shown that the patent claims should be limited with respect to the term "communication system." The specification does not limit the scope of the invention or this term either by express language of disclaimer or by a consistent description of the entire invention with the limitation urged by Big River. Accordingly, the Court adopts its prior construction from the *Vonage* case, which Sprint urges here, and construes "communication system" to mean *a plurality of network elements and connections forming a network to transfer information*.

B. "Network Code . . ."

The parties request construction of the following phrases: "a network code that identifies a network element to provide egress from the packet communication system for the user communication," found in the '561 Patent, claim 1; and "a network code that identifies a network element to provide egress for the user communication from the packet communication system," found in the '561 Patent, claim 24, and the '052 Patent, claim 1. In *Vonage*, the Court construed these phrases to mean *a logical address identifying a network element which network element provides an exit from a packet communication system*. *See* 518 F. Supp. 2d at 1318-19. The court rejected Sprint's argument that "network code" should refer generally to "information"; instead, the Court followed the specification's statement that "[n]etwork codes are the logical addresses of network elements." *See id.* (citing '650 Family at 12:47-53). In the present case, Sprint

argues that each phrase should be construed to mean *a code identifying a network element which network element provides an exit from a packet communication system*. Big River seeks to construe each phrase to mean *the logical address of a network element that provides an exit from a packet communication system via a user communication path*. Thus, Sprint seeks to substitute "code" for "logical address" in the Court's prior construction of the phrases, while Big River seeks to add the phrase "via a communication path."

With respect to its addition, Big River makes its argument in conjunction with its argument regarding the meaning of "communication system." For the reasons stated above, *see supra* Part III.A, the Court rejects that argument as it also relates to the "network code . . ." phases. Specifically, Big River has not shown that the specification defines these terms or describes the invention generally with this limitation.

With respect to its position in favor of "code" over "logical address," Sprint argues that "code" need not be defined further and that defining it as a logical address imposes an unnecessary limitation. Sprint notes that the '561 Patent includes the following dependent claim: "The method of claim **1** wherein the network code comprises a logical address of the network element." ('561 Patent, claim 15.) The Court agrees that this dependent claim suggests that "network code" as used in the independent claim was not intended to be limited to mean a "logical address". The Court further agrees with Sprint that the specification's description of "network codes" as "logical addresses" in the second sentence of description of one embodiment of the invention

could be read to be limited to that embodiment. ('605 Family at 12:49-51.) Big River has not offered any argument in favor of "logical address" over "network code" in this construction. Accordingly, the Court construes the phrases "a network code that identifies a network element to provide egress from the packet communication system for the user communication" and "a network code that identifies a network element to provide egress for the user communication from the packet communication system" to mean *a code identifying a network element which network element provides an exit from a packet communication system.*

C. "Packet Communication System" and "Asynchronous Communication System"

The '052 Patent, claim 1, and the '561 Patent, claims 1 and 24, include the term "packet communication system," while the '932 Patent, claims 1 and 18, include the term "asynchronous communication system." Sprint argues that these terms do not require further construction, in light of the Court's construction of "communication system." Big River asks the Court to construe these terms to mean *a packet network, in which signaling is used to set up a communication path at call setup and is not carried over a user communication system.*

Sprint argues that the Court need not construe "communication system" differently as modified by "packet" or "asynchronous". As Sprint points out, in *Vonage*, the Court declined to construe "asynchronous communication" as used in a patent of the '301 Family, based on its acceptance of "asynchronous" as a term of art understood in

the telecommunications field. *See* 500 F. Supp. 2d at 1318-19. Big River agrees that these terms should be construed consistent with the construction of "communication system," but it does not explain why the modifiers "asynchronous" and "packet" require further definition—indeed, Big River's definition uses the word "packet". Instead Big River repeats its argument that the specification describes the invention as requiring that a complete communication path be set up prior to the transmission of any data. For the same reasons set forth above, *see supra* Part III.A, the Court rejects Big River's attempt to limit the scope of the claims in this way. Accordingly, the Court declines to construe further the terms "packet communication system" or "asynchronous communication system."

D. "Signaling Message"

The parties ask the Court to construe the term "signaling message," found in the '561 Patent, claims 1, 3, 6, 24, and 26. Sprint argues that the term means *a message used to set up or tear down a call*, which is the same construction that the Court adopted for this term in *Vonage*. *See* 518 F. Supp. 2d at 1318. Big River argues that term means *signaling in a particular format used to set up or tear down a communication path for a call*. Thus, Big River seeks to add the concepts of a "particular format" and a "communication path" to the Court's previous construction.

With respect to the latter addition, Big River relies on its prior argument that a communication path is needed, and it points to language in the specification defining

"signaling" as the transfer of information "to establish communications paths." ('605 Family at 5:23-25.) The Court again rejects this construction, based on the same reasons stated above. *See supra* Part III.A. Moreover, as Sprint notes, this excerpt from the specification refers to "paths" in the plural, and therefore it cannot support a limitation of a single path for a call. The excerpt also describes "signaling" and not "signaling message." Big River has clearly not attempted to define "signaling" generally, as it repeats that term in its proposed construction. Finally, Big River's limitation is further undermined by the language of the claim itself, which requires the "signaling message" to select not a path, but rather a network code. ('561 Patent, claim 1.) The Court rejects Big River's proposed addition of a reference to "a communication path" in its construction of "signaling message."

In support of its other proposed addition, Big River cites to references in the specification that distinguish between a "signaling message" and mere "signaling". Big River thus argues that "message" connotes "format", in the sense that if one changes the format, then a new signaling message results. Sprint finds it unremarkable that a given signaling message would have a format, as all messages must. On this issue, the Court agrees with Sprint. In retaining "signaling" in its construction, Big River has essentially attempted to define "message", but it has not explained why that word needs defining. Moreover, the Court finds Big River's proposed language potentially confusing, as it suggests that the signaling must be in one particular format without defining that required format, instead of merely suggesting that messages have formats (as apparently

intended by Big River).

Accordingly, the Court retain its previous construction of "signaling message" to mean *a message used to set up or tear down a call*.

E. "Call Having a First Message"

Claims 1 and 18 of the '932 Patent refer to a system or method for handling a "call having a first message," in which a processing system receives and processes the "first message" to select a narrowband switch and generates and transmits a "second message" based on that selected switch. In *Vonage*, the Court adopted Sprint's proposed construction of "first message" in these claims to mean *a signaling message that is distinct from the second message*. *See* 518 F. Supp. 2d at 1322-23. Based on that ruling, Sprint now argues that "call having a first message" should be construed to mean *a call having a signaling message that is distinct from the second message*. Big River seeks to construe this phrase to mean *the original signaling message created by the call*. The Court rejects Big River's construction.

The Court begins with the language of the claims, at it must. Big River notes that the claims require that the "second message" be based on a selection made from processing of the "first message," which necessarily requires that the "second message" come after the "first message;" thus, Big River argues that the claims impose a temporal limitation. The Court agrees with Sprint, however, that because that sequence is dictated by the claim, "first" and "second" need not be further defined to incorporate that

sequence. Moreover, the fact that the "first message" comes earlier in time than the "second message" does not bear on whether the "first message" is required to be the original message in the call.

The Court also does not agree with Big River that the language "call having a first message" somehow associates the "first message" with the entire call in a temporal fashion. Instead, the use of that language would appear to contradict Big River's construction, as a patentee intending Big River's meaning could more easily have referred to a call generally (which must of course have signals, and therefore a first-in-time signal as well) and the processing of the "original" or "first" message of that call. The use of the phrase "call having a first message" suggests that "first message" refers to something other than the original signaling message of the entire call, using "first" to distinguish its role from that of the "second" (or "third" or "fourth") message discussed in the claims.

Big River also cites portions of the specification that indicate that signaling messages are created when calls are placed. Those references do not use the term "first message," however, and they do not suggest that the message processed in the claims must be the original message of the call. To the contrary, the specification specifically notes that the element from which the processor receives the "first message" may be a switch in another network ('650 Family at 8:49-51), which would mean that the first-in-time signaling message for the call took place within that other network, and not within the claimed system.

Finally, the Court rejects Big River's argument based on the patent application's prosecution history. In the cited references, the applicant distinguished prior art by noting that the present invention routes the signaling message to the processor instead of routing it to a switch first. The applicant did not state that the invention required processing of the original message of a call, and the claims in the application at that point did not include the term "first message" at any rate.

Accordingly, the Court construes "call having a first message" in these claims to mean *a call having a signaling message that is distinct from the second message*.

F. "Second Message"

In light of the Court's construction of "first message" and "call having a first message," Sprint contends that the term "second message" in claims 1 and 18 of the '932 Patent need not be further construed, or, at worst, should be construed merely as distinguished from the "first message." Big River seeks to construe "second message" in these claims to mean *a message identifying a user communication path for a call*. Big River argues, based on its argument regarding the term "communication system," that the invention's "core concept" of setting up a single communication path before information is transmitted should be incorporated into this term. The Court again rejects this argument for the reasons stated previously. *See supra* Part III.A. Moreover, in the claims, there is no reference to a communication path; rather, the "second message" is based on the selection of a switch. Finally, the Court does not agree that "second

message" has no ordinary meaning in this context; rather, given the Court's construction of "first message," the meaning is quite clear. The Court concludes that the term "second message" in these claims does not require construction.

G. "Receiving a Signaling Message . . . from a Narrowband Communication System"

Claim 1 of the '561 Patent claims a "method of operating a processing system to control a packet communication system for a user communication," which method comprises, among other things, "receiving a signaling message for the user communication from a narrowband communication system into the processing system." Sprint argues that this latter phrase does not require further construction in light of the Court's previous constructions.[4] Big River seeks to construe that phrase to mean *receiving a signaling message that was sent by a narrowband communication system*. Thus, Big River seeks to replace the reference to a message "*from*" a narrowband communication system with language requiring a message "*sent by*" such a system." Big River argues that its language is consistent with the ordinary meaning of "from" and that the change is necessary to clarify that the processor must receive the same signaling

[4]The Court has now construed "communication system" and "signaling message" in this action. *See supra* Part III.A, III.D. In Sprint's related infringement actions against Nuvox and PAETEC, the parties disputed the proper construction of the term "user communication," with Sprint seeking to construe that term to mean *the user voice or data traffic*. Sprint and Big River have not referenced any dispute concerning "user communication" in the present action between them, however, and the Court therefore has not construed that term.

message that the narrowband system sent. Big River suggests that Sprint would want the phrase to remain ambiguous so that it could argue that the claim requirements are satisfied if some information from the narrowband system eventually reaches the processor, even if the signaling message from the narrowband system does not.

The Court rejects this argument. As Sprint notes, the '605 Family specification includes the statement that "[p]referably, no or minimal changes are made to the signaling prior to the signaling being received by the [processor]." ('605 Family at 7:66-8:1.) Thus, the specification suggests that the signaling message received from the narrowband system may, in fact, have been modified, in which case the processor would not receive an identical message to the one sent by the narrowband system. Moreover, Big River's concern about the possible argument by Sprint is allayed by the restriction in the claim itself that the processor receive a "message"—as opposed to some "information"—from the narrowband system.

In equating its construction with the ordinary meaning of "from", Big River implicitly concedes that, in the context of this claim, the word "from" should not have a meaning different from that ordinary meaning. The Court concludes that the ordinary meaning suffices in this case, without the scope limitation urged by Big River. Accordingly, the Court rejects Big River's proposed construction and declines to construe this phrase further.

H. "Generating a Signaling Message . . . from the Processing System

to the Narrowband Communication System"

Claim 24 of the '561 Patent claims a method of operating a processing system that comprises, among other things, "generating a signaling message for the user communication and transferring the signaling message from the processing system to the narrowband communication system." Sprint argues that no further construction of this phrase is necessary in light of the Court's construction of its constituent terms.[5] Big River proposes construing the phrase to mean *generating within a processing system a signaling message in narrowband format and transferring the message to a narrowband communication system*. Big River agrees that the phrase should be construed consistent with the Court's construction of its constituent terms, but it argues in favor of the additional limitation that the generated signaling message must be in narrowband format. The Court rejects Big River's addition to the claim language.

As Sprint notes, there is no requirement in the claim or the specification that the processor generate the message in narrowband format. Big River cites to a statement in the specification that the narrowband switch receives the call and signal in its own format. ('605 Family at 13:19-20.) That description does not require that the signal have been *sent* by the processor in narrowband format, however; it only states that the signal is *received* by the switch in such format. Sprint notes that the specification also refers to translation of the signal by the processor ('605 Family at 14:28-40); in the same way,

[5]"Generating a . . . message" is construed *infra* Part V.D. With respect to the other constituent terms, see *supra* note 4.

the signal might be translated to the narrowband format on the way to the narrowband system. The other specification excerpt cited by Big River ('605 Family at 17:43-45), in which the processor formulates an SS7 message (which is in narrowband format), relates only to a single embodiment.

Big River has not identified claim or specification language requiring that this particular message be sent in narrowband format. Therefore, the Court declines to narrow the scope of the claim to include such a limitation. The Court declines to construe this phrase further.

IV. '301 Family of Patents

The Court next construes disputed terms from the '301 Family of patents.

A. "Interworking Unit"

The parties seek construction of the term "interworking unit," which may be found in the '429 Patent, claims 1 and 23, and the '084 Patent, claim 1. Sprint construes the term to mean *device that converts narrowband communication signals into a packet format*. Big River asks the Court to construe the term to mean *ATM interworking multiplexer*, with ATM referring to Asynchronous Transfer Mode, as the Court did in the *Vonage* case. *See* 500 F. Supp. 2d at 1314-16. The Court agrees with Big River that the Court's prior construction of this term should be retained.

In *Vonage*, the Court construed the terms "interworking device" and "interworking unit" to mean *ATM interworking multiplexer*. *See id.* The Court agreed

with Sprint that the claim language itself does not limit the packet format to ATM, but could also include IP technology. *See id.* at 1314. Nevertheless, the Court chose to limit the scope of the claims, as follows:

> [T]he specification repeatedly discloses in numerous important respects that an ATM interworking multiplexer is the one and only "interworking device" claimed in the specification. The disclosures in the specification are not merely limited to preferred embodiments or versions of the invention. Reading the claim term in view of the specification, it seems that the only logical conclusion that could be reached by one of ordinary skill in the art is that the inventor intended the term "interworking device" to mean an ATM interworking multiplexer.

Id. at 1314-15. The Court then supported that construction with numerous references to the '301 Family specification, particularly the summary of the invention, that state explicitly that the claimed invention (and not merely an embodiment) involves use of an ATM interworking multiplexer. *See id.* at 1315 (citing, e.g., '301 Family at 2:14-50).

Sprint asks the Court to reconsider its ruling on this issue from *Vonage*. Sprint again stresses the absence of any language in the claims themselves that would limit their scope to ATM interworking multiplexers, as well as the absence of any express disclaimer of scope in the specification. *See Medegen MMS, Inc. v. ICU Med., Inc.*, 317 F. App'x 982, 987-88 (Fed. Cir. Nov. 20, 2008) (unpub. op.) (cited by Sprint) (reversing district court, which had construed patent term consistent with specification's description of a single embodiment of the invention). As noted above, however, under the law of the Federal Circuit, the lack of an express disclaimer is not necessarily fatal where, as here, the specification repeatedly and consistently describes the entire invention (and not

merely one or more embodiments) in a particular manner, thereby supporting a limiting construction of otherwise-broad claim language. *See supra* Part II.

The Court has again reviewed the '301 Family specification, and it again concludes that a person with ordinary skill in the art would conclude from that specification that the claimed invention is limited to the use of an ATM interworking multiplexer. For example, in its third sentence, before any embodiments or versions are discussed, the summary of the invention flatly states that "[t]he system comprises an ATM interworking multiplexer and a signaling processor linked to the ATM interworking multiplexer." ('301 Family at 2:12-15.) Other portions of the specification, and particularly the summary, are definitive on this point, as noted by the Court in *Vonage*.

Sprint repeats its argument from *Vonage* that the specification contains language suggesting that the interworking unit could be any "muxing" system. As the Court noted in rejecting this argument previously, the specification does not define "mux" or "muxing system" except for its apparent use of those terms as a shorthand version of the term "ATM interworking multiplexer." *See Vonage*, 500 F. Supp. 2d at 1315-16. Nor has Sprint provided any other definition of the word "mux" in its submissions to the Court. Thus, there is no basis to conclude that the references to alternative "muxing systems" were intended to contemplate various non-ATM multiplexers as opposed to different ATM multiplexers. Therefore, the Court concludes that the references to "muxes" do not overcome the specification's repeated description of the invention as one

that includes an ATM interworking multiplexer.

Nor is the Court persuaded by Sprint's claim differentiation argument. Sprint notes that dependent claims in the patents refer to the method of the independent claims with the additional limitation of "asynchronous transfer mode" communications or connections. ('084 Patent, claim 8; '064 Patent, claim 6.) The Federal Circuit has stressed, however, that the presumption that dependent claims must be narrower than their independent claims is rebuttable, and the presence of such dependent claims is therefore not dispositive:

> [W]hile it is true that dependent claims can aid in interpreting the scope of claims from which they depend, they are only an aid to interpretation and are not conclusive. Indeed the presumption created by the doctrine of claim differentiation is not a hard and fast rule and will be overcome by a contrary construction dictated by the written description or prosecution history.

Regents of Univ. of Calif. v. Dakocytomation Calif., Inc., 517 F.3d 1364, 1375 (Fed. Cir. 2008) (internal quotations and citations omitted). In this case, the clear references in the specification to the ATM interworking multiplexer as a part of the claimed invention (and not merely an embodiment) dictates the construction urged by Big River and overcomes any presumption raised by the dependent claims. The consistent descriptions of the invention as a whole also distinguish the present case from *Medegen* and other cases cited by Sprint.

Accordingly, the Court construes "interworking unit" to mean *ATM interworking multiplexer*.

B. "Identifier(s)"

The parties ask the Court to construe the term "identifier" or "identifiers" found in the '429 Patent, claims 1, 2, 6, 8, 23, 24, and 30, and in the '084 Patent, claim 1. In *Vonage*, the Court rejected Vonage's construction that would have limited the term to mean *a VPI/VCI combination*; the Court instead adopted Sprint's proposed construction, and construed the term "identifier" to mean *data for routing information in a packet network*. *See* 500 F. Supp. 2d at 1312-14. Sprint urges the same construction here. Big River argues that the term should be construed to mean *data for routing user information in a packet network over a pre-provisioned virtual connection.* Thus, Big River seeks to add language limiting the scope of the claimed invention to the use of pre-provisioned virtual connections (PPVCs). The Court rejects Big River's proposed limitation.

The Court first concludes that the language of the claims themselves does not support Big River's construction. Big River argues that because ATM technology uses virtual connections, the claims' references to the "interworking unit" necessarily refer also to virtual connections under the Court's construction of that term. The claims do not contain any language, however, indicating that those virtual connections must be pre-provisioned.

Once again, Big River relies primarily on the specification to support its proposed limitation. Big River does not point to any specific language in the specification defining or describing "identifier" with reference to PPVCs. Instead, Big River argues generally that the specification describes the claimed invention as requiring PPVCs.

Specifically, Big River cites portions of the specification relating to the use of an ATM cross-connect system, and it notes that, according to the background of the specification, "connections through cross-connect systems must be pre-provisioned." ('301 Family at 1:28-29.) The specification makes clear, however, that the ATM cross-connect system represents only an exemplary embodiment of the invention. For instance, the background also states that "*[s]ome* ATM systems have used ATM cross-connects to provide virtual connections." ('301 Family at 1:22-23 (emphasis added).) The summary states that the system "*could* also include an ATM cross-connect system." ('301 Family at 2: 42-43 (emphasis added).) In reference to one drawing, the specification states: "FIG. **4** depicts virtual connections provided by the ATM cross connect system *in a version of the invention*, although numerous other techniques for providing virtual connections will be appreciated by one skilled in the art, and the invention contemplates any such system." ('301 Family at 8:61-65 (emphasis added).) Figure 1 is also described as showing a cross-connect system with PPVCs, but that figure also depicts only "*a version* of the present invention." ('301 Family at 3:36 (emphasis added).)

Thus, Big River has failed to identify any language in the specification that describes the invention generally, and not merely some embodiments, as requiring PPVCs. Nor has Big River adequately explained why the invention would require PPVCs even for versions not employing an ATM cross-connect system. Big River points to the invention's purpose, as stated in the specification, of allowing call-by-call switching without utilizing the switches' signaling and processing capabilities. (E.g.,

'301 Family at 2:64-67.) Big River has not shown, however, that fulfilling that purpose requires the use of PPVCs as the invention is described in the specification. The Court concludes that Big River has not shown that the specification repeatedly or consistently describes the invention as a whole (and not merely in embodiments) as requiring the use of PPVCs, and that Big River has therefore failed to add a limitation to the otherwise-broad claim language under the *Microsoft* standard.

The Court also rejects Big River's argument based on the patent's prosecution history. In the cited excerpt, the applicant distinguished the prior reference as involving an ATM multiplexer that does not use signaling that identifies a selected virtual connection. That citation may support the idea that the present invention uses virtual connections; it does not support the limitation that those connections must be pre-provisioned, however.

Finally, Big River cites to deposition testimony by Sprint's expert in which the expert testified that "[t]his particular patent and in particular the written description describes preprovisioned connections," and that in "this patent family we're dealing with preprovisioned circuits" such as VCI/VPI pairs. It is clear from the specification, however, as noted above, that such a system represents only an exemplary embodiment of the claimed invention. Thus, the Court concludes that these isolated snippets from the expert's testimony is not sufficient to overcome the relevant evidence on this issue in the intrinsic record.

In its brief, Big River has attempted to divide its proposed addition to the

definition of "identifier" into two separate concepts: the use of virtual connections and the requirement that those connections be pre-provisioned. The Court has rejected the insertion of the latter concept into this term. With respect to the former concept, Sprint does not dispute that virtual connections are used, a point confirmed by the summary of the specification. Big River has not explained, however, why the use of virtual connections in general should be included in this construction of "identifier". The use of virtual connections as a feature of ATM technology can be easily explained to the jury at trial. Therefore, the Court declines to incorporate that feature into the construction of this term.

For these reasons, the Court construes the term "identifier" to mean *data for routing information in a packet network*.

C. "Set-Up Signaling Associated with the Call"

Claims 1 and 35 of the '064 Patent include the phrase "set-up signaling associated with the call." Sprint would construe this phrase to mean *a message or messages used to set up the call*, a construction that follows the Court's construction of the term "set-up signaling" in *Vonage*. *See* 518 F. Supp. 2d at 1317-18. Big River seeks to construe the phrase to mean *a signaling message created at call initiation used to select a pre-provisioned virtual connection for the call*. Big River thus seeks to inject two additional limitations into the Court's prior construction.

In *Vonage*, the Court noted that its construction was supported by excerpts from

the specification's background and summary of the invention. *See id.* at 1318. The Court rejected Vonage's attempt to limit the claim term to mean *a narrowband signaling message*, noting that the specification's references to initial address messages (IAMs) (a type of narrowband signaling) were merely exemplary. *See id.* at 1317-18.

Big River first argues that the construction of this phrase should include the requirement that the signaling message be "created at call initiation." The claims do not include such a limitation. The Court does not agree that the language "associated with the call" bears on this issue of whether the message must be created at call initiation. Big River also points to the very same references in the specification to IAMs that the Court found to be merely exemplary in *Vonage*. Big River stresses that it is not attempting to limit the claim to IAMs, but argues that the IAM examples are consistent with, and therefore support, its argument based on the claim language. Again, however, the Court cannot conclude that the claim language permits Big River's inclusion of the "created at call initiation" requirement.

With respect to its addition of language relating to the selection of a PPVC, Big River relies on its previous argument concerning the construction of the term "identifier". The Court rejects that argument for the same reasons stated above. *See supra* Part IV.B. Moreover, as Sprint points out, the claim language indicates that the set-up signaling is processed to select a DS0 connection, not a PPVC.

Accordingly, the Court rejects Big River's additions to its previous construction, and it construes the phrase "set-up signaling associated with the call" to mean *a message*

or messages used to set up the call.

D. "Transfer(ring) the Asynchronous Communications" and "Receiv(e)(ing) . . . Asynchronous Communication(s)"

Claims 1, 2, 23, and 24 of the '429 Patent; claims 1 and 35 of the '064 Patent; and claim 1 of the '086 Patent include the terms "transfer" or "transferring" or "receive" or "receiving" in connection with the term "asynchronous communication." Sprint contends that these terms need no further construction. Big River urges the Court to construe these terms to mean *sending/accepting the user communication(s) of a call over a pre-provisioned virtual connection.*

Big River does not offer any argument why the terms "transferring" and "receiving" require construction to mean "sending" and "accepting". The Court concludes that those verbs do not need further construction in light of their ordinary meanings. Big River also seeks once again to inject a limitation requiring PPVCs into the claims, based on its arguments concerning the construction of "identifier". The Court again rejects that argument for the reasons already stated. *See supra* Part IV.B. The Court also notes that in the *Vonage* case, it concluded that the term "asynchronous communication" did not require construction, based on the fact that the term was well understood in the art. *See* 500 F. Supp. 2d at 1318-19. Big River has not explained why the Court's conclusion in that regard was incorrect. Accordingly, the Court declines to construe these phrases from the patent claims.

E. "Connection"

The parties agree that the term "connection" from the '084 Patent, claim 1, means *transmission medium/media used to carry user communications*. Therefore, the Court also adopts that construction.

V. Both Families of Patents

Finally, the Court construes disputed terms that may be found in both the '605 Family of patents and the '301 Family of patents.[6]

A. "Processing System"

The parties dispute the construction of the term "processing system," which may be found in the '052 Patent, claims 1 and 4; the '561 Patent, claims 1, 23, 24, and 38; the '932 Patent, claims 1 and 18; the '429 Patent, claims 1, 5, 23, and 27; and the '064 Patent, claims 1, 7, 35, and 41. Sprint contends that the term does not require further construction. Big River argues that the term should be construed to mean *a system that processes signaling to determine a communication path comprising a plurality of network elements and connections for the user communication of a call*.

[6]As noted above, *see supra* note 4, in its actions against Nuvox and PAETEC, Sprint sought a construction of the term "user communication," which may be found in both families of patents. Sprint and Big River have not referenced any dispute concerning that term in the present action between them, however, and the Court therefore declines to construe the term "user communication."

In *Vonage*, the Court concluded that the term "processing system," as used in the '301 Family of patents, did not require further construction. *See* 518 F. Supp. 2d at 1315-17. The Court rejected Vonage's proposed construction, which included the concept of selecting virtual connections, in part because the claims themselves refer to the selection of other elements, such as an identifier or DS0 connection. *See id.* at 1315-16.

Big River argues that the term "processing system" should be construed to incorporate the idea from both families of patents that the invention uses signaling to establish communication paths in advance of the calls. Big River again relies on its arguments concerning the construction of "communication system" ('605 Family) and "identifier" ('301 Family). The Court rejects Big River's argument here, just as it did in construing those other terms. *See supra* Part III.A, IV.B.

The Court also notes, as it did in *Vonage*, that the proposed construction, which here involves the processing of "signaling" to determine a "communication path," is not consistent with the actual language of the claims. For instance, in the '932 Patent, the claimed invention processes a "message" to select a "narrowband switch." In the '052 Patent and the '561 Patent, the system selects a "network code." In the '429 Patent, the system processes "information" to select an "identifier". In the '064 Patent, the system selects a "DS0 connection."

Finally, Big River does not explain how the term "processing system" is ambiguous and thus in need of construction, as it contends. Big River's own

construction, by which it attempts to impose the "communication path" limitation, uses the phrase "a system that processes," thereby conceding implicitly that the ordinary meaning of those words will be understood. The Court agrees with Sprint that the context of the claims makes clear the different features and functions of the processing system that are actually claimed in the patents. Accordingly, the Court rejects Big River's proposed construction and declines to construe the term "processing system" as used in these patents.

B. Process(ing) . . . to Select"

The terms "process . . . to select" and "processing . . . to select" may be found in the '932 Patent, claims 1 and 18; the '052 Patent, claim 1; the '561 Patent, claims 1 and 6; the '429 Patent, claims 1 and 23; and the '064 Patent, claims 1 and 35. Sprint construes these terms to mean *process/processing to participate in the selecting*. Big River construes these terms to mean *a processing system processing/that processes [the information] and making/makes the selection*.

In its summary judgment ruling in the *Vonage* case, the Court did not construe this particular term, but it noted that this language in two patents did not require that the processing system actually "select" a network code, but instead required only that the system "process [the signaling] to select" the code. *See* 500 F. Supp. 2d at 1323. Therefore, a fact question remained regarding infringement in light of evidence that

Vonage's processing system was "involved in the selection of the network code." *See id.*

Subsequently, Sprint and Vonage asked the Court to construe this term "process(ing) to select." *See* 518 F. Supp. 2d at 1320-21. Relying on the Court's summary judgment order, Sprint argued that the term should mean *process/processing to participate in selecting*; Vonage, on the other hand, argued that the term should mean *process/processing and make/making a selection*. *See id.* In response to Sprint's argument, the Court noted that it had not approached the issue as one of construction in the prior order, and "did not ascribe the definitive meaning to the claim terms that the processing must do nothing more than merely 'participate' in the selection." *See id.* at 1321. The Court also rejected Vonage's argument based on a portion of the prosecution history in which the applicant distinguished another invention as one that selects actions for switches instead of selecting connections, as in the present invention; the Court held that the excerpt was not helpful because it did not address this distinction between making a selection and merely participating in the selection. *See id.* at 1321-22. Because neither party had directed the Court to relevant supporting evidence in the intrinsic patent record, the Court rejected both parties' constructions and concluded that the claim term did not require further construction. *See id.*

In the present case as well, the parties dispute whether the processing system must make the requisite selection or merely participate in making the selection. Big River relies on the same excerpt from the prosecution history that Vonage cited. Big River has

not explained how the Court erred in considering that excerpt in *Vonage*, however, and the Court again finds that excerpt to be unhelpful. Big River also notes that the goal of the invention in the '301 Family of patents is to avoid having to use the processing capabilities of switches; recognition of that goal does not resolve whether the processor must make the selection or merely participate, however.

As Sprint notes, the specification does make clear that information from elements other than the processor may be used in selection. With respect to the parties' dispute regarding the scope of the claims, the Court agrees with Sprint and concludes, as it did in *Vonage*, that the claim language does not require the processing system actually to select the network element, but only that it "processes [information] . . . to select" the element. Thus, the Court rejects Big River's proposed construction. The Court further concludes that the scope of the claims might be ambiguous on this issue, to the extent that someone might believe that the selection must be made without help from any other network elements. Therefore, the Court adopts Sprint's proposed construction, and construes the terms "process . . . to select" and "processing . . . to select" to mean *process/processing to participate in the selecting*. *See O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1361 (Fed. Cir. 2008) (court may be required to determine scope of claim when reliance on claim terms' ordinary meaning does not resolve parties' dispute).

C. "Route" and "Routing"

The verbs "route" and "routing" are used in the '561 Patent, claims 1 and 24; the '429 Patent, claims 2 and 24; and the '084 Patent, claim 1. In the *Vonage* case, Sprint contended that these terms meant *direct/directing through a communication system*, while Vonage argued that they meant *deliver/delivering to the destination through a communication system*. *See* 518 F. Supp. 2d at 1311. The Court decided that both parties were partially correct in their arguments, as follows:

> The intrinsic record concerning use of these claim terms comports with the widely accepted meaning of these commonly understood words. On the one hand, "route" means to "direct" or "send". But, to "route" something does not mean to direct or send it aimlessly. Rather, it means to send it by a selected route, or in a specified direction, or by selecting a course to be followed for final delivery, or by dispatching it to its appropriate destination. In this sense, the term "route" is consistent with the specification language relied on by Vonage, in which various items are routed for delivery to their destinations. At the same time, however, neither the plain meaning of the word nor the specification indicates that "routing" requires that the item actually be delivered to its final destination.
>
> Accordingly, the court construes the claim terms "route" and "routing" consistently with their commonly understood meaning, which is also consistent with the intrinsic record, to mean *direct/directing through a communication system by a selected route or in a specified direction*.

Id. at 1311-12 (citations omitted) (citing Webster's Third New International Dictionary at 1981 (unabridged ed. 1993)).

In the present case, Sprint argues in favor of the same construction made by the Court in *Vonage*. Big River argues that the proper construction would not include the alternative meaning "in a specified direction;" thus, Big River urges the Court to

construe "route" and "routing" to mean *direct/directing through a communication system by a selected route*. The Court rejects this argument by Big River.

First, Big River cites to various dictionaries that appear to define the verb "route" to include directing or sending by a selected route, but do not appear to include sending in a specified direction as a meaning of the word. The Court concludes, however, that the ordinary meaning of "routing" may include sending in a particular direction, as shown in the unabridged dictionary cited by the Court in *Vonage*. Indeed, one of the dictionaries cited by Big River includes "direct"—which is obviously related in meaning to "direction"—as a synonym for the verb "route". *See* Webster's, *supra*, at 640 (definition of to "direct" includes to aim or guide); *see also id.* at 45 (definition of to "aim" includes to point in a particular direction). The main point of the Court's prior construction was that to be "routed", something must be directed, though not aimlessly, and the Court's construction of the term to include directing by a selected route or in a specified direction accurately captures that meaning.

Second, Big River relies on the specifications' references to the concepts of a communication path and virtual connections, in arguing that a specific route or course is required in the inventions. The Court again rejects Big River's attempt to limit the patents' claims in those ways. *See supra* Part III.A, IV.B. Moreover, as Sprint points out, the claims specify that the "routing" is to network elements, not along communication paths.

For these reasons, the Court retains its prior construction of the terms "route" and

"routing" to mean *direct/directing through a communication system by a selected route or in a specified direction*.

D. "Generate" and "Generating"

The parties dispute the proper construction of the terms "generate" and "generating", which are used in the context of the generation of a message by the processing system in the '429 Patent, claims 1 and 23; the '064 Patent, claims 1 and 35; the '561 Patent, claims 1 and 24; and the '932 Patent, claims 1 and 18. In *Vonage*, Sprint argued that the term "generate/generating a message" meant *assemble/assembling information into a message for the first time in connection with setting up a call*; Vonage argued that the term meant *create/creating for the first time*. *See* 518 F. Supp. 2d at 1312-13. The Court resolved that dispute as follows:

> Sprint correctly points out that the language of the various claims demonstrates that the messages are generated by assembling information because each of the claims requires the generation of a message that includes some particular content. [The Court then listed examples from the claims.]
>
> Vonage relies on language contained in the specifications which states that the signaling processor "generates new signaling." This language introduces the concept that the generated message, or signaling, must be "new". This is not inconsistent with the generally accepted meaning of the term "generate". *See* Webster's, *supra*, at 945 (defining "generate" to include, for example, to bring into existence and/or to originate). Importantly, however, this language from the specification does not indicate that the content of the message must be new, but rather that the signaling itself must be new.
>
> Ultimately, the court believes that the overall thrust of Sprint's

> proposed claim construction is essentially correct. Sprint has attempted to include the concept that the message itself must be new by incorporating the language "for the first time in connection with setting up the call." But, the "for the first time" language and its proposed placement within the properly construed claim term is confusing. Additionally, the language proposed by Vonage "create/creating for the first time" is redundant and confusing as to what, precisely, must be created for the first time. In an attempt to give more clarity to the term "generate", the claim term "message" must be modified to clarify that the message is what is being newly generated based on assembled information. Accordingly, the court construes the claim terms "generate a message" and "generating a message" to mean *assemble/assembling information to create a message*.

Id. (citations to patents omitted).

In the present case, Sprint asks the Court to reaffirm its construction of these terms from *Vonage*. Big River, on the other hand, asks the Court to construe "generate" and "generating" to mean *create/creating rather than forward/forwarding*. Big River argues that adding the distinction between creating and forwarding is necessary because the issue arose at the *Vonage* trial, as Sprint's expert conceded in his testimony that the processing system does not "generate" a message if it merely forwards a message, in the sense of sending on the exact message that it has received. The Court's prior reasoning in the *Vonage* order, however, is not inconsistent with the distinction urged by Big River. As the Court concluded previously, the signaling (message) must be new, but the content need not be new, and the signaling is generated by the assembling of information. *See id.* Big River has not suggested that that reasoning is flawed in any way.

Big River seeks to add language to the construction making clear that "generating" does not include "forwarding". The ordinary meaning of "create" (used in

the Court's construction), however, already incorporates the idea that there must be a new signal, and that the processing system may not simply pass along an existing signal. Just as the Court concluded that "creating for the first time" was redundant in *Vonage*, *see id.* at 1313, it also concludes that the language "creating rather than forwarding" is redundant. Big River's addition, therefore, does not add anything to the construction.

Moreover, in its presentation to the Court at the claim construction hearing, Big River identified the "key point of dispute" with respect to this term as "[w]hether 'generating' requires creating new message content." Clearly, as the Court reasoned in *Vonage*, the claims require new signaling, but they do not require new content. To the extent that Big River's construction relies on a contrary answer to that key question, then, it must be rejected.

Big River's reference to the prosecution history of the patents is unavailing. In that excerpt, the prior reference was distinguished as a system that merely routed signaling; thus, the reference does not indicate that the signal cannot include pre-existing content.

Finally, Big River would replace "assemble/assembling information to create" with "create/creating", based on its argument that the assembly of information is inherent in the act of "creating". The Court disagrees, however, that Big River's change would aid a jury; to the contrary, the "assembling" language, which has support in the claims and specifications, resolves the parties' "key" dispute by clarifying that the generated message may include pre-existing content.

Accordingly, the Court construes "generate" and "generating" in this context to mean *assemble/assembling information to create*.[7]

E. "DS0 Connection"

The parties dispute the proper construction of the term "DS0 connection," which is found in the '429 Patent, claims 1 and 23; the '064 Patent, claims 1 and 35; the '084 Patent, claim 7; and the '052 Patent, claim 3. In the jury instructions in the *Vonage* case, the Court construed this term to mean *a channel over which DS0 communication signals (a term of art meaning Digital Signal Level 0) are transmitted or received*. Sprint urges the same construction in this case. Big River contends that the term should be construed to mean *a 64 kbit/s connection.*

Big River relies on a technical dictionary's definition of "DS0" as a signal at 64 kilobits per second. Big River also points to the '301 Family specification's reference to the grouping of individual DS0s into an "Nx64 call", with the "N" apparently referring to the number of individual DS0s and the "64" referring to the bit rate for each DS0. ('301 Family at 8:54-58.) The problem with Big River's argument, however, is that the cited references may define "DS0" as a 64-kilobit-per-second signal, but they do not define a "DS0 connection." The ordinary meaning of "DS0 connection" would

[7]With respect to the phrase "generating a control message indicating the network code," Sprint also asks the Court to construe "the network code" to mean "the code identifying the network element." The Court finds such further construction unnecessary, however, in light of its previous treatment of the term "network code".

be a channel using DS0 signals, as the Court instructed the jury in *Vonage*. Big River has not provided evidence that a "DS0 connection," as the term is used in the patent claims, must relate to the use of a single DS0 signal, so that the bit rate for the entire connection is 64 kilobits per second. The Court therefore rejects Big River's proposed construction.

Big River has not challenged the Court's prior construction in any other way. Accordingly, the Court again construes "DS0 connection" to mean *a channel over which DS0 communication signals (a term of art meaning Digital Signal Level 0) are transmitted or received*.

F. "Telecommunication Switches" and "Switch(es)"

The term "telecommunication switches" may be found in the '429 Patent, claims 5 and 27, and the '064 Patent, claims 7 and 41. The terms "switch" and "switches" may be found in the '561 Patent, claims 23 and 38, and the '932 Patent, claims 1 and 18. In *Vonage*, the Court adopted Sprint's unopposed construction, and construed "telecommunication switches" to mean *devices that set up calls and relay voice and/or data information from one connection to another*. *See* 518 F. Supp. 2d at 1317. In the present case, Sprint would use that same construction for both "telecommunication switches" and "switch(es)". Big River submits that these terms do not require construction, but it does not offer any argument or explain how the Court's prior construction is inaccurate. Accordingly, the Court adopts Sprint's proposed

construction, and it construes these terms to mean *devices that set up calls and relay voice and/or data information from one connection to another*.

IT IS THEREFORE ORDERED BY THE COURT THAT certain terms in the patents at issue in this action are construed as set forth herein.

IT IS SO ORDERED.

Dated this 8th day of July, 2009, in Kansas City, Kansas.

__s/ John W. Lungstrum_____
John W. Lungstrum
United States District Judge